

Subgeneric taxonomy and nomenclature of the genus *Hypselotriton* Wolterstorff, 1934 (Amphibia, Urodela)

Alain DUBOIS* & Jean RAFFAËLLI**

* Reptiles & Amphibiens, UMR 7205 OSEB,
Département Systématique & Evolution, Muséum national d'Histoire naturelle,
CP 30, 25 rue Cuvier, 75005 Paris, France
<adubois@mnhn.fr>

** Penclen, 56420 Plumelec, France
<jean.raffaelli@laposte.net>

Two subgenera were recently recognized in the new genus *Hypselotriton* Wolterstorff, 1934. The nucleospecies of the subgenus *Pingia* Chang, 1935, described as *Pachytriton granulatus* Chang, 1933, was recently shown not to be a member of this genus but a synonym of *Pachytriton labiatus* (Unterstein, 1930). A new nomen is therefore proposed for this subgenus which includes three species: *Hypselotriton fudingensis* (Wu, Wang, Jiang & Hanken, 2010), *Hypselotriton orientalis* (David, 1875) and *Hypselotriton orphicus* (Risch, 1983).

In a previous paper (DUBOIS & RAFFAËLLI, 2009), we proposed a new taxonomy of the urodelan family SALIANDRIDAE Goldfuss, 1820, in which we restricted the former genus *Cynops* Tschudi, 1838 to the Japanese species, whereas we placed all Chinese species in the genus *Hypselotriton* Wolterstorff, 1934. Within this latter genus, we recognized two subgenera, corresponding to the two species-groups identified by ZHAO & HU (1984, 1988) The subgeneric hyponymous (nominotypical) nomen *Hypselotriton*, the nucleospecies (type-species) of which is *Molge nolletstorffi* Boulenger, 1905 by original designation, applies to the subgenus including the species *Hypselotriton chenggonensis* (Kou & Xing, 1983), *Hypselotriton cyanurus* (Liu, Hu & Yang, 1962) with its two subspecies, and *Hypselotriton wolterstorffi* (Boulenger, 1905). For the second subgenus, including the species *Hypselotriton orientalis* (David, 1875) and *Hypselotriton orphicus* (Risch, 1983), we used the generic nomen *Pingia* Chang, 1935 This nomen is based on the nucleospecies *Pachytriton granulatus* Chang, 1933, the holotype of which was lost and the taxonomic status of which was long disputed. HOU et al. (2009) had designated a neotype and provided a redescription of this species, which they considered close to, although distinct from, *Hypselotriton orientalis*, so that we recognized three species in the subgenus *Pingia* of *Hypselotriton*.

Shortly after however, NISHIKAWA et al. (2009) provided a detailed study of morphological variation in the species *Pachytriton labiatus* (Unterstein, 1930) and concluded that the

lost holotype and the neotype of *Pachytriton granulosis* belonged in fact in the latter species. The confusion was due to the fact that the juvenile phenotype of *Pachytriton labiatus* is very different from its adult phenotype. The specific nomen *Pachytriton granulosis* then becomes an invalid junior synonym of *Pachytriton labiatus*, and the generic nomen *Pingia* an invalid junior synonym of *Pachytriton*.

This finding leaves the second subgenus of *Hypselotriton* unnamed. Besides the two species *Hypselotriton orientalis* and *Hypselotriton orphicus*, it includes the species *Hypselotriton fudingensis* recently described by Wu et al. (2010). As no genus-series nomen is available for it, we hereby provide a nomen for this subgenus. The entexognosis, the diagnosis and the idiagnosis we give to this taxon follow the same plans and should be compared with those of the subgenus *Hypselotriton* in DUBOIS & RAFFAELLI (2009: 45–48).

Subgenus *Cynotriton* nov

Nucleospecies. *Triton* (*Cynops*) *orientalis* David, 1875, by present designation

Etymology. From the Greek *kuon*, genitive of *kuon* (“dog”) and generic nomen *Triton* Laurenti, 1768.

Grammatical gender. – Masculine.

Entexognosis. – The most inclusive holophyletic taxon including the species *Hypselotriton orientalis* (David, 1875) and excluding the species *Hypselotriton wolterstorffi* (Boulenger, 1905).

Diagnosis (1) Frontal process of premaxillary short. (2) Parotoid glands well developed. (3) Tubercules on external side of hands and feet absent (4) Skin slightly to very granular (5) Adaptability in terrarium high (6) Altitudinal distribution low (0–1000 m).

Idiagnosis. (1) TL 70–90 mm. (2) Habitus stout. Trunk almost quadrangular. Parotoids well developed. Skin slightly to very granular. (3) Dorsal coloration dull, sometimes with bright (red) spots or bands. Ventral coloration very bright, red. (4) Sex dimorphism strong, male small. (5) Mainly aquatic, in lentic habitat. (6) Adaptability in terrarium high, with tolerance of a large gradient of temperature (5–25°C). (7) Eastern China. (8) No tubercules on the external side of hands and feet.

Content. *Hypselotriton* (*Cynotriton*) *fudingensis* (Wu, Wang, Jiang & Hanken, 2010), *Hypselotriton* (*Cynotriton*) *orientalis* (David, 1875); *Hypselotriton* (*Cynotriton*) *orphicus* (Risch, 1983).

LITERATURE CITED

- DUBOIS, A. & RAFFAELLI, J., 2009. A new ergotaxonomy of the family Salamandridae Goldfuss, 1820 (Amphibia, Urodela). *Alytes*, 26 (1–4): 1–85.
- HOU, M., ZHOU, Z.-C., LI, P.-P., & LÜ, S.-Q., 2009. – Rediscovery of *Pingia granulosis* (Chang, 1933) and description of the neotype specimens [sic]. *Sichuan Journal of Zoology*, 28 (1): 15–18, 3 pl.

- NISHIKAWA, K., JIANG, J.-P., MATSUI, M. & CHEN, C.-S., 2009. Morphological variation in *Pachytriton labiatus* and a re-assessment of the taxonomic status of *P. granulatus* (Amphibia: Urodela: Salamandridae). *Current Herpetology*, **28** (2): 49–64
- WU, Y., WANG, Y., JIANG, K. & HANKEN, J., 2010. A new newt of the genus *Cynops* (Caudata: Salamandridae) from Fujian Province, southeastern China. *Zootaxa*, **2346**: 42–52.
- ZHAO, E. & HU, Q., 1984 - Studies on Chinese tailed amphibians. Chengdu, Siciuan Scientific & Technical Publishing House: [i–v] + 1–68, 3 pl.
- 1988. - The classification and evolution of the Chinese Salamandridae. In: E. ZHAO, Q. HU, Y. JIANG & Y. YANG (ed.), *Studies on Chinese Salamanders*, in: *Contributions in Herpetology*, **4**, SSAR, Oxford (Ohio): 12–26.

Corresponding editor Stéphane GROSJEAN